

Dr. Stuckermann  
Dr. Hoffmann  
30.06.04 Yu

# PATENT COOPERATION TREATY

PCT/EP2003/012921

From the INTERNATIONAL BUREAU

## PCT

### NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

CROMPTON VINYL ADDITIVES GMBH  
RIEGER, Rainer  
Gewerblicher Rechtschutz  
Chemiestrasse 22  
68623 Lampertheim  
ALLEMAGNE

EINGEGANGEN  
Gewerblicher Rechtschutz Lampertheim

30. Juni 2004

Date of mailing (day/month/year) 17 June 2004 (17.06.2004)	EINGEGANGEN 02. Juli 2004	Erledigt
Applicant's or agent's file reference 65129AWOM1	Erl.: .....	IMPORTANT NOTICE
International application No. PCT/EP2003/012921	International filing date (day/month/year) 19 November 2003 (19.11.2003)	Priority date (day/month/year) 02 December 2002 (02.12.2002)
Applicant CROMPTON VINYL ADDITIVES GMBH et al		

1. Notice is hereby given that the International Bureau has **communicated**, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

AU, AZ, BY, CH, CN, CO, DZ, EP, HU, JP, KG, KP, KR, MD, MK, MZ, RU, TM, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE, AG, AL, AM, AP, AT, BA, BB, BG, BR, BW, BZ, CA, CR, CU, CZ, DE, DK, DM, EA, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, KE, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MG, MN, MW, MX, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, SY, TJ, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this notice is a copy of the international application as published by the International Bureau on  
17 June 2004 (17.06.2004) under No. WO 2004/050754

4. **TIME LIMITS for filing a demand for international preliminary examination and for entry into the national phase**

The applicable time limit for entering the national phase will, **subject to what is said in the following paragraph**, be **30 MONTHS** from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of **19 months** from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see *PCT Gazette* No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the *PCT Newsletter*, October and November 2001 and February 2002 issues.

In practice, **time limits other than the 30-month time limit** will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For **regular updates on the applicable time limits** (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

For filing a **demand for international preliminary examination**, see the *PCT Applicant's Guide*, Volume I/A, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Ellen Moyse
Faxsimile No.+41 22 740 14 35	Faxsimile No.+41 22 338 89 75

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/12921

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C08K5/3462

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C08K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 967 245 A (WITCO VINYL ADDITIVES GMBH) 29 December 1999 (1999-12-29) page 2, lines 30,31; claims 2,3 page 2, line 43	25, 26
A	----- EP 0 065 934 A (CIBA GEIGY AG) 1 December 1982 (1982-12-01) Beispiele 1e, 4, 6 zusammen mit Anspruch 2 page 3, lines 16-19	1-24
X	EP 0 768 336 A (CIBA GEIGY AG) 16 April 1997 (1997-04-16) Anspruch 3 zusammen mit S. 3 Z. 22-23 Beispiele II 2; III 2; IV 2,5,8,11; V 2,5,8; VI 1,3,4; VII 2,5,7 zusammen mit S. 3 Z. 22-23 ----- -/-	1-26

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- \*'A' document defining the general state of the art which is not considered to be of particular relevance
- \*'E' earlier document but published on or after the international filing date
- \*'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*'O' document referring to an oral disclosure, use, exhibition or other means
- \*'P' document published prior to the international filing date but later than the priority date claimed

\*'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*'8' document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

24 May 2004

02/06/2004

Name and mailing address of the ISA

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NL - 2280 HV Rijswijk  
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Authorized officer

Kositza, M

**INTERNATIONAL SEARCH REPORT**

International Application No  
PCT/EP 03/12921

**C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 16 94 873 A (SIEGLE & CO GMBH G) 27 August 1970 (1970-08-27) the whole document -----	1-26

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/EP 03/12921

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
EP 0967245	A 29-12-1999		CA 2269746 A1 EP 0967245 A1 JP 2000026681 A NO 993182 A US 6274654 B1	26-12-1999 29-12-1999 25-01-2000 27-12-1999 14-08-2001
EP 0065934	A 01-12-1982		CA 1180476 A1 DE 3265213 D1 EP 0065934 A1 JP 57200436 A	01-01-1985 12-09-1985 01-12-1982 08-12-1982
EP 0768336	A 16-04-1997		AT 257163 T AT 224423 T AU 714489 B2 AU 6804196 A BR 9605107 A CA 2187708 A1 CN 1154381 A , B DE 59609682 D1 DE 59610885 D1 DK 768336 T3 EP 1046668 A2 EP 1327658 A1 EP 1327659 A1 EP 1327660 A1 EP 1325941 A1 EP 1327661 A1 EP 1327662 A1 EP 0768336 A2 ES 2134177 T1 JP 9125058 A NO 964328 A TW 505676 B US 6194494 B1 US 5925696 A ZA 9608605 A	15-01-2004 15-10-2002 06-01-2000 17-04-1997 07-07-1998 14-04-1997 16-07-1997 24-10-2002 05-02-2004 27-01-2003 25-10-2000 16-07-2003 16-07-2003 16-07-2003 16-07-2003 16-07-2003 16-04-1997 01-10-1999 13-05-1997 14-04-1997 11-10-2002 27-02-2001 20-07-1999 14-04-1997
DE 1694873	A 27-08-1970		BE 687294 A DE 1694873 A1 FR 1513317 A US 3436362 A	01-03-1967 27-08-1970 16-02-1968 01-04-1969

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

RIEGER, Rainer  
CROMPTON VINYL ADDITIVES GMBH  
Postfach 17 60  
68623 Lampertheim  
GERMANY

[Stamp]

**PCT**

## NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

<p>Applicant's or agent's file reference 65129AWOM1</p>		<p>Date of mailing (day/month/year)      04.03.2005</p>	
<p>International application No. PCT/EP 03/12921</p>		<p>International filing date (day/month/year) 19.11.2003</p>	<p>Priority date (day/month/year) 02.12.2002</p>
<p>Applicant CROMPTON VINYL ADDITIVES GMBH et al.</p>			

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the International preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The Applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purpose of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purpose of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

<p>Name and mailing address of the IPEA/</p> <p> European Patent Office D-80298 Munich Tel. +49 89 2399 - 0, Tx: 523656 epmu d Fax: +49 89 2399 - 4465</p>	<p>Authorized officer:</p> <p>Georgakopoulou, P </p> <p>Tel. +49 89 2399-6037</p>
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**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

(PCT Article 36 and Rule 70)

Applicant's or Agent's file reference 65129AWOM1	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/12921	International filing date (day/month/year) 19.11.2003	Priority date (day/month/year) 02.12.2002
International Patent Classification (IPC) or national classification and IPC C08K5/3462		
Applicant CROMPTON VINYL ADDITIVES GMBH et al.		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets including this title page.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Instruction 607 of Administrative Instructions of the PCT).</p> <p>These annexes consist of a total of 1 sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I <input checked="" type="checkbox"/> Basis of the report</li> <li>II <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V <input checked="" type="checkbox"/> Reasoned statement according to Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input type="checkbox"/> Certain observations on the international application</li> </ul>

Date of submission of the demand 17.06.2004	Date of completion of this report 04.03.2005
Name and mailing address of the IPEA   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0, Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer:   Kositza, M Telephone No. +49 89 2399-7885

INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT

International application No. PCT/EP 03/12921

## I. Basis of the report

1. This report has been drawn up on the basis of the following elements (*the replacement sheets received by the receiving office in response to an invitation according to Article 14 are considered in the present report as "originally filed" and are not annexed to the report as they contain no amendments (Rules 70.16 and 70.17).*):

## Description, pages:

1 - 43 as originally filed

## Claims, No.:

1 - 20 as originally filed

21 - 26 received on 27.02.2005 with the letter of 17.02.2005

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP 03/12921

5.  This report has been written disregarding (some of) the amendments, which were considered as going beyond the description of the invention, as filed, as is indicated below (Rule 70.2(c)):

*(All replacement sheets comprising amendments of this nature should be indicated in point 1 and attached to this report).*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes:	Claims	25 - 26
	No:	Claims	1 - 24
Inventive Step (IS)	Yes:	Claims	25 - 26
	No:	Claims	1 - 24
Industrial Applicability (IA)	Yes:	Claims	1 - 26
	No:	Claims	

2. Citations and explanations

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT -  
ADDITIONAL SHEET**

International Application  
No. PCT/EP 03/12921

**Citations**

D1: EP-A-0 967 245  
D2: EP-A-0 065 934  
5 D3: EP-A-0 768 336

**Novelty**

Claims 1-24 are not new.  
10 Claims 25-26 are new.

D2 describes compositions comprising monosubstituted uracils according to formula (I), methods and uses that all possess features of claims 1-24. See D2 page 3 lines 16-19 and claim ( $R^2$  and  $R^3$  = hydrogen), and also page 3 lines 13-27, page 8 lines 6-17.

**Inventive step**

20 Claims 25-26 involve an inventive step.

On the basis of D2 the skilled person obtains from the state of the art no indication that monosubstituted uracils according to formula ((II)) are highly suitable 25 for the color stabilization of chlorinated polymers.

**Industrial applicability**

30 The subject matter of the claims is industrially applicable.

### Citations

D1: EP-A-0 967 245  
D2: EP-A-0 065 934  
D3: EP-A-0 768 336

### Novelty

Claims 1 – 24 are not new.  
Claims 25 – 26 are new.

D2 describes compositions comprising monosubstituted uracils according to formula (I), methods and uses that all possess features of claims 1 – 24. See D2 page 3 lines 16 – 19 and claim ( $R^2$  and  $R^3$  = hydrogen), and also page 3 lines 13 – 27, page 8 lines 6 – 17.

### Inventive step

Claims 25 – 26 involve an inventive step.

On the basis of D2 the skilled person obtains from the state of the art no indication that monosubstituted uracils according to formula (II) are highly suitable for the color stabilization of chlorinated polymers.

### Industrial applicability

The subject matter of the claims is industrially applicable.

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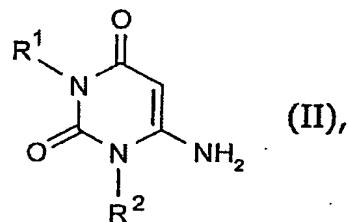
25 21. The composition as claimed in claim 1 comprising as chlorinated polymer a recyclate containing at least one percent by weight of recycled polymer.

30 22. A method of stabilizing chlorinated polymers, characterized in that at least one compound of the formula I as claimed in claim 1 is incorporated into the chlorinated polymer.

23. The use of compounds of the general formula I as claimed in claim 1 for stabilizing halogenated polymers.

5 24. The use of compounds of the general formula I as claimed in claim 1 for stabilizing recycled halogenated polymers.

25. Monosubstituted 6-aminouracils of the formula II



10

where

$R^1$  or  $R^2$  is  $C_3$ - $C_8$ -cycloalkyl,  $C_4$ - $C_{10}$ -hydroxyalkyl or acetoxy/benzoyloxy- $C_2$ - $C_{10}$ -alkyl and  $R^1$  or  $R^2$  is hydrogen.

15 26. Compounds as claimed in claim 25, wherein  $R^1$  or  $R^2$  is  $C_5$ - or  $C_6$ -cycloalkyl.